1. I use the term, "wheatchex" to refer to the prefabricated sets of three outer columns, three stories tall, connected with spandrel plates as shown in Figure **1**.

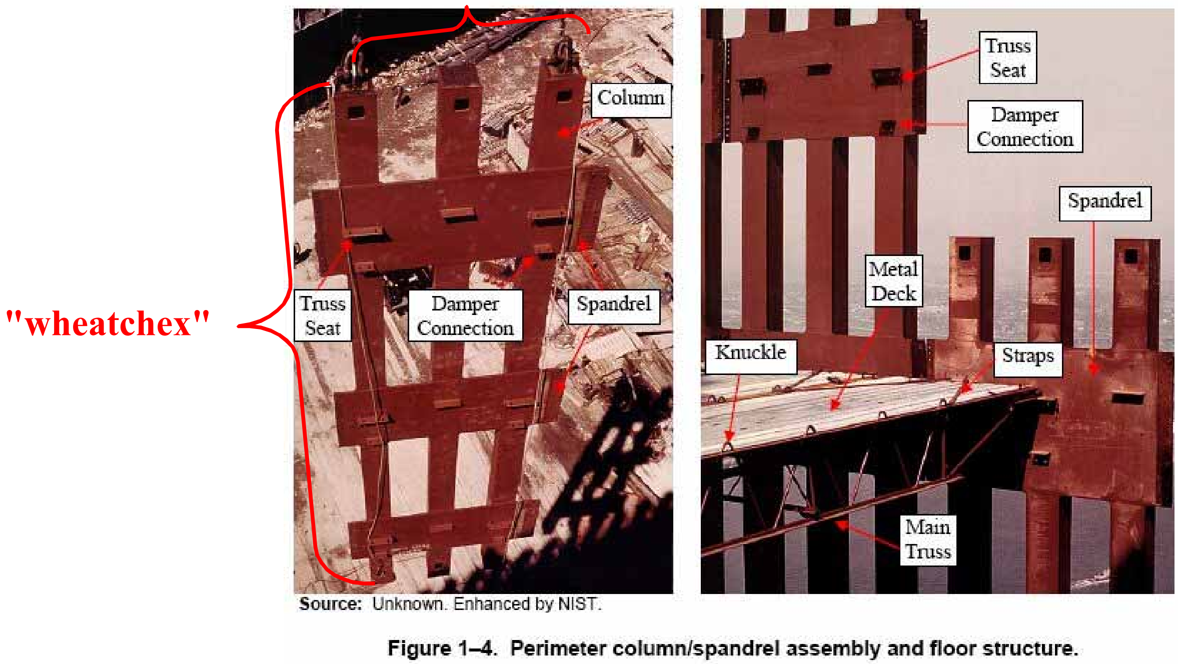


Figure 1. Perimeter column/spandrel assembly and floor structure.

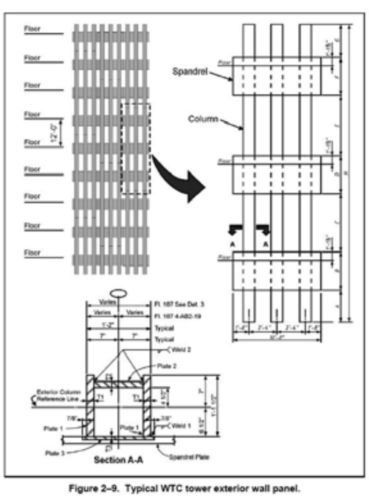


Figure 2. Diagram of a "wheatchex"

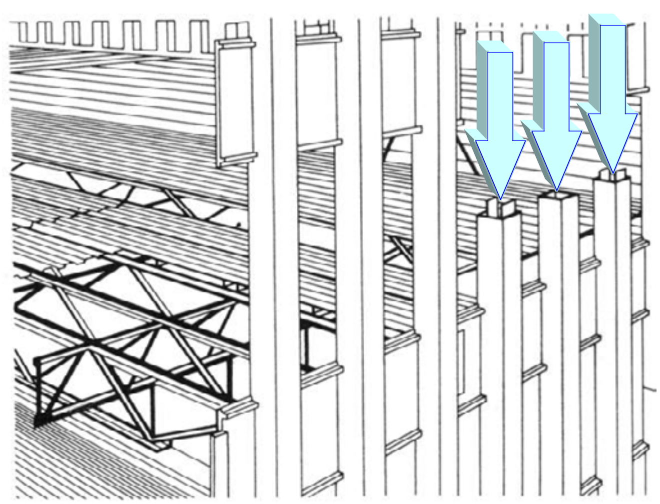
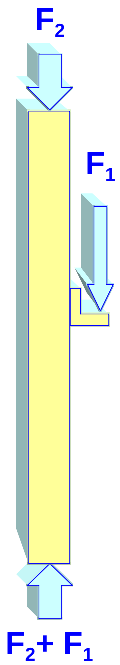


Figure 3. Cartoon of vertical loading on perimeter columns.

If the WTC was destroyed by a gravity collapse, what would engineers expect to see?



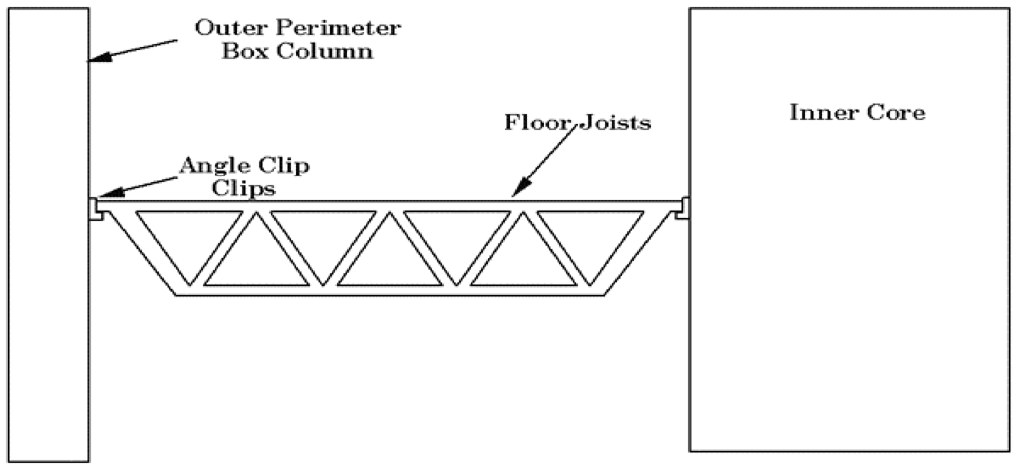
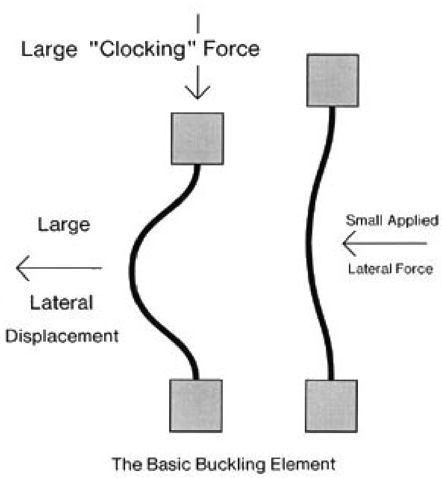
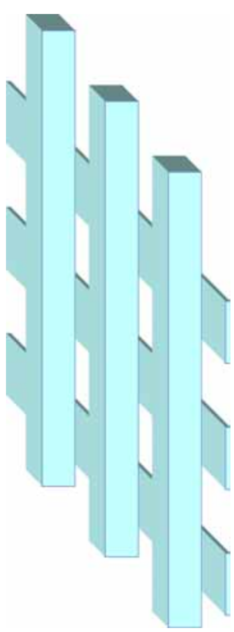
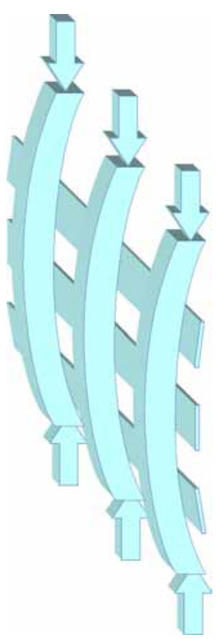


Figure 4. Loading **Figure 5.** Cross-section diagram of floor truss connections.

2. Either the truss supports hold or they don't. If they don't hold and there is pancaking of the floors, there will not be column failure. If the floors pancake down, the columns will no longer be carrying a significant load. If the truss supports hold and there is no pancaking ,and if the columns are overloaded and/or tremendously weakened, there may be column buckling. Consider the case of buckling.







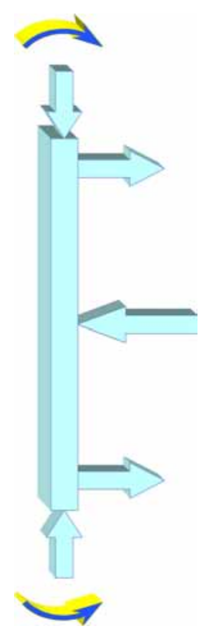


Figure 6. Buckling **Figure 7.** Wheatchex **Figure 8.** Outward-bowing columns. **Figure 9.** Loading diagram

Source:

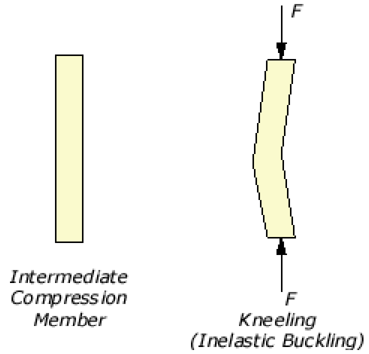


Figure 10. Kneeling

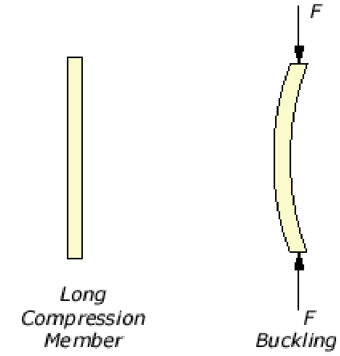


Figure 11. Bowing

$$F_{cr} = \frac{EI\pi^2}{L^2}$$

Figure 12. Critical load formula

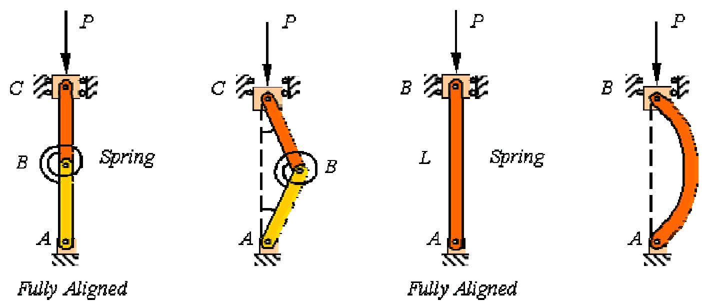


Figure 13. Kneeling and bowing.

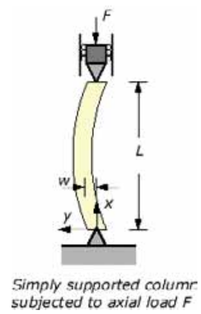


Figure 14. Loading

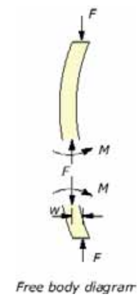


Figure 15. Loading

3. If there is more force (overload and/or high temperature) than the column can carry, it will bow outward or inward, depending on the minor lateral loading.

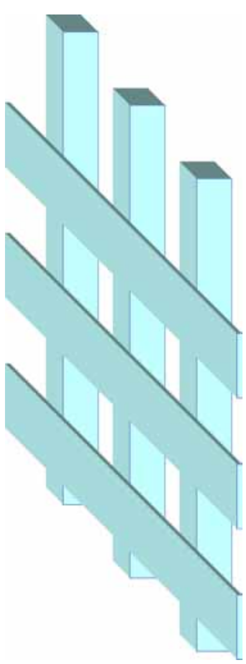


Figure 16. Wheatchex before.

Figure 2-8 Erection of floor framing during original construction.

Figure 17. Floor framing.

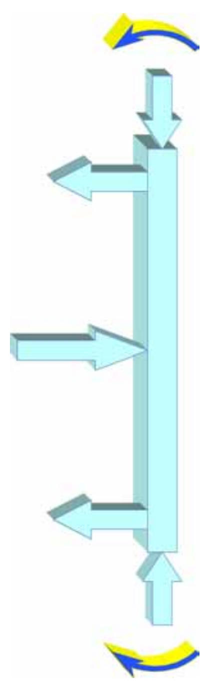


Figure 18. Loading.

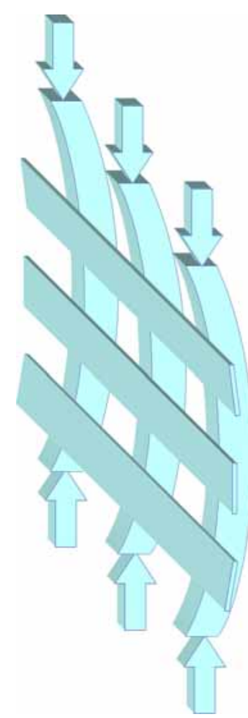
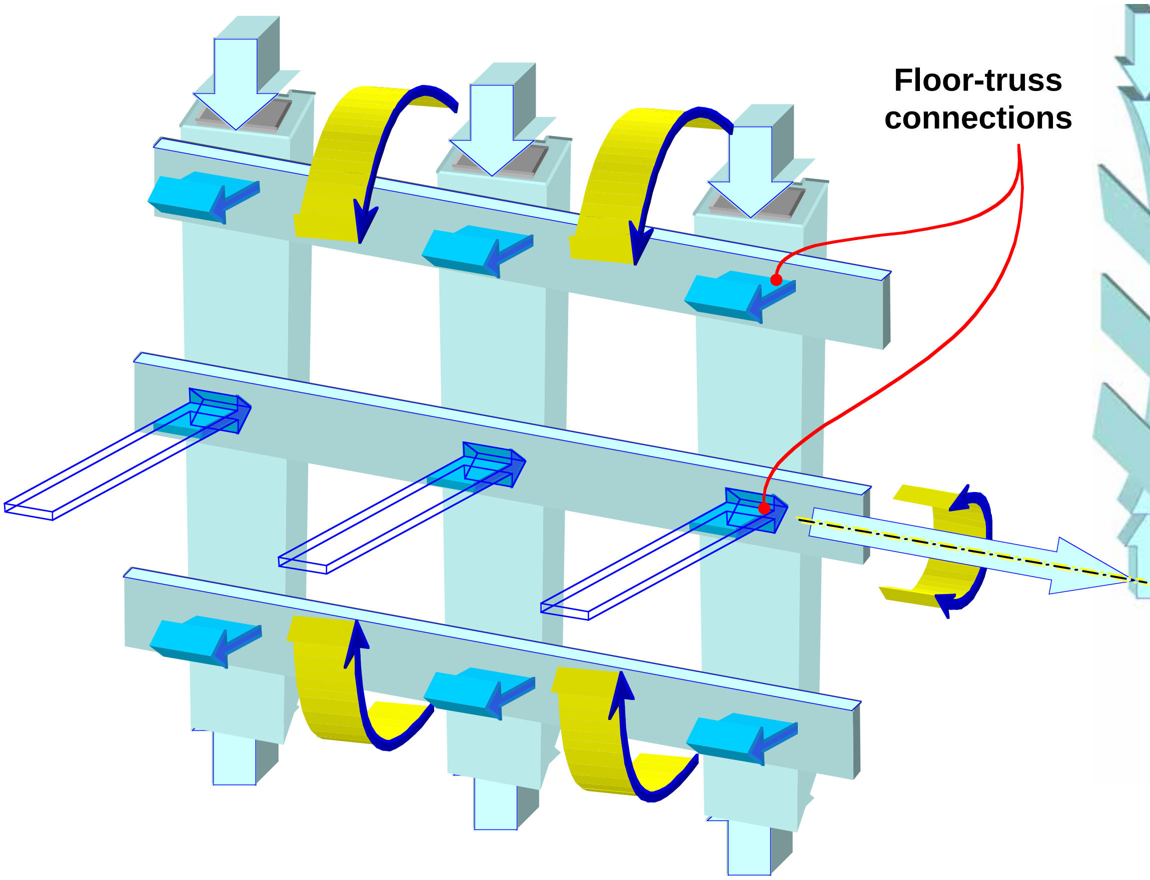


Figure 19. Wheatchex after.



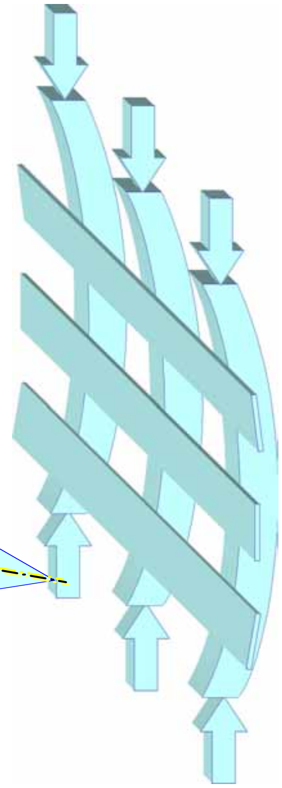
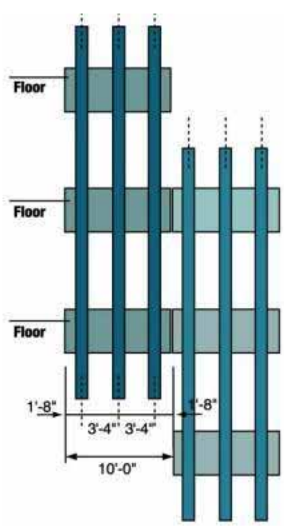
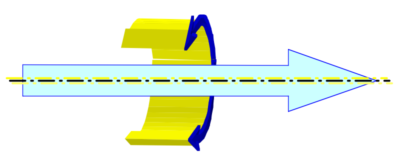


Figure 20. The outer columns are subjected to a vertical axial load. If overloaded, bending in this direction is likely.

Figure 21. Resulting deformation.





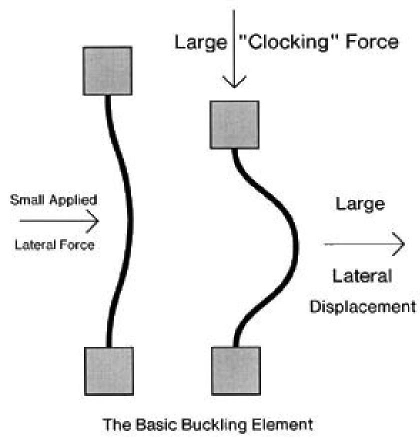


Figure 22. Bending about a horizontal axis (which would be expected in a "collapse" from overload and/or weakening)

Figure 23. Buckling.

Figure 24. I refer to this as the "rolled-up-carpet" phenomenon. (Cropped and lightened photo.) Original is on the NIST website: http://wtc.nist.gov/media/gallery.htm
http://wtc.nist.gov/images/steel11_hires.jpg

Figure 25. WTC beams. This is not consistent with a gravity collapse or conventional explosion.
Original is on the NIST website: http://wtc.nist.gov/media/gallery.htm

Figure 26. WTC beams. This is not consistent with a gravity collapse or conventional explosion.
Original is on the NIST website: http://wtc.nist.gov/media/gallery.htm

Figure 27. WTC beams. This is not consistent with a gravity collapse or conventional explosion. On the NIST website: http://wtc.nist.gov/media/gallery.htm

4. On the floor is a cluster of beams wrapped with spandrel plates. This looks more like a rolled-up carpet than it does perimeter columns of the WTC (wheatchex).

Figure 28. Spandrel belts wrap around columns.

Figure 29. Spandrel belts wrap around columns

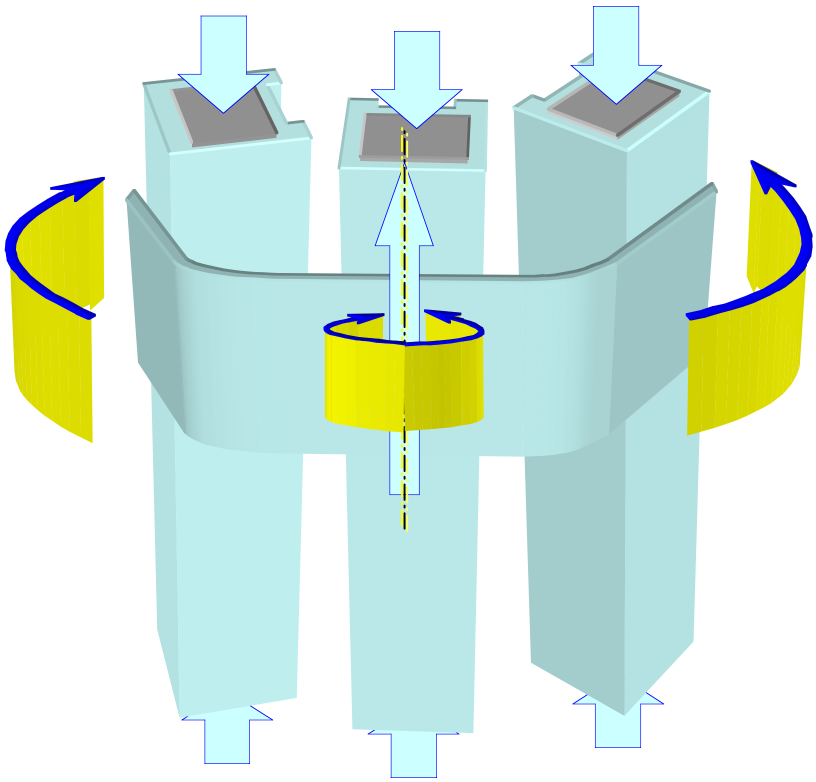


Figure 30. In a gravity collapse, the outer columns are essentially subjected to no loading in this direction.

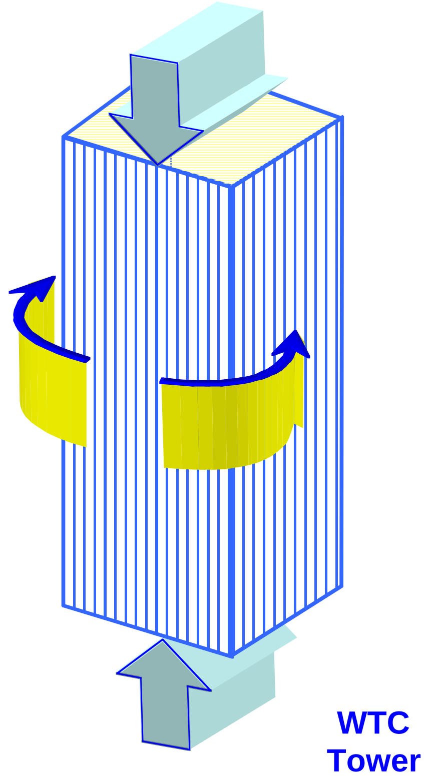


Figure 31. **This makes no sense.**

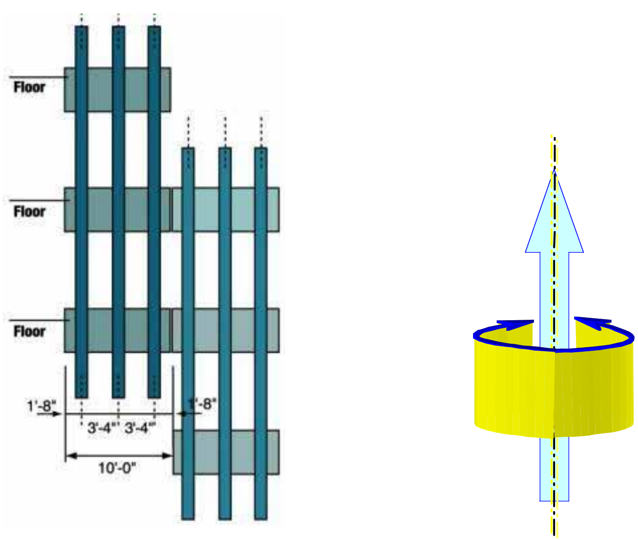


Figure 32. Bending about a vertical axis makes no sense. The building is not loaded in that way.
Source:

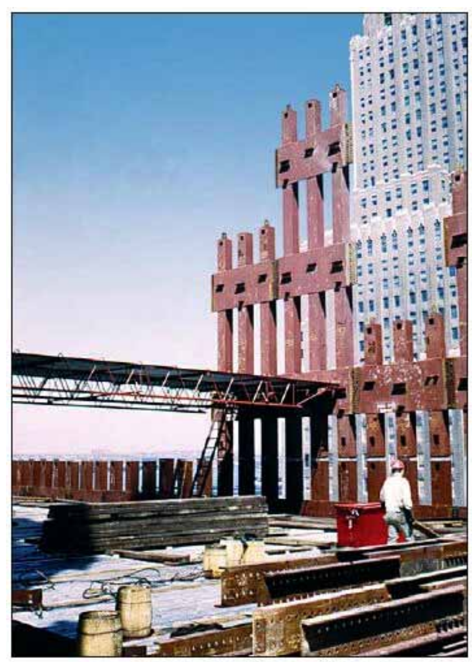


Figure 2-8 Erection of floor framing during original construction.

Figure 33. Erection of floor framing during original construction.
http://killtown.911review.org/images/wtc-gallery/fema403-2/2-8_exterior-wall.jpg

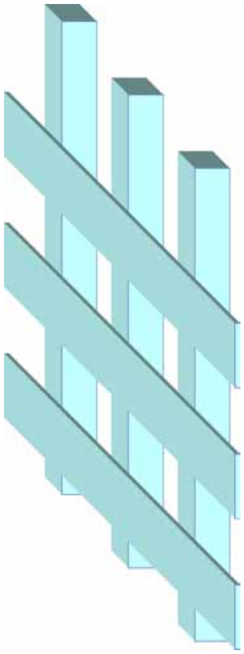


Figure 34. Undeformed columns.

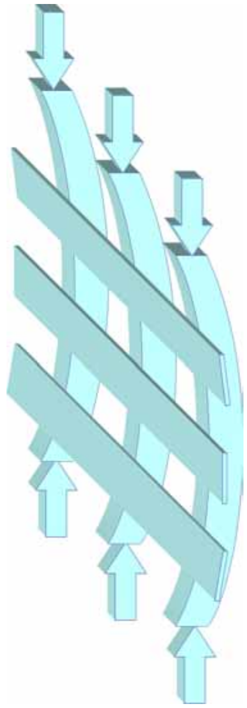


Figure 35. Deformed (buckled) columns

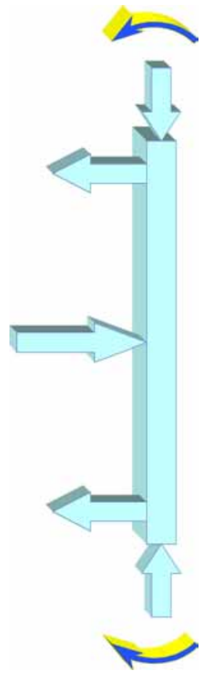


Figure 36. Load diagram.

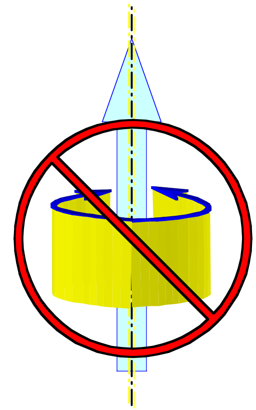


Figure 37. **Bending around a vertical axis is inconsistent with an overload from above or a "gravity collapse."**

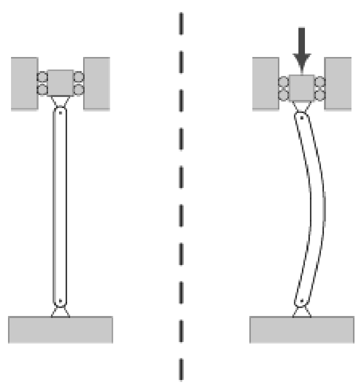


Figure 38. Axially loaded structure, demonstrating buckling.
http://en.wikipedia.org/wiki/Buckling

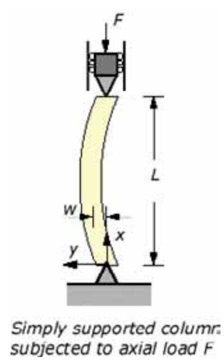


Figure 39. Loading diagram.

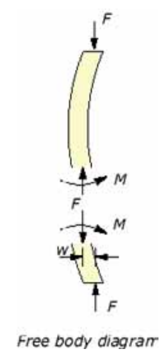


Figure 40. Loading diagram.

Gilsanz Murray Steficek LLP (GMS)

R-- Development of WTC 7 Structural Models and Collapse Hypotheses,
Gilsanz knows better.

Figure F-A-2a: Piece K-1 (also labeled K-13).

Figure 41. WTC beams wrapped like a **burrito**.
NISTNCSTAR1-3C Appxs.pdf, Attachment A, **WJE** No. 2003.0323.0, Page A-497, NISTNCSTAR 1-3C Appxs.pdf, File page (211 of 258), http://wtc.nist.gov/WTCfinal1-3.zip

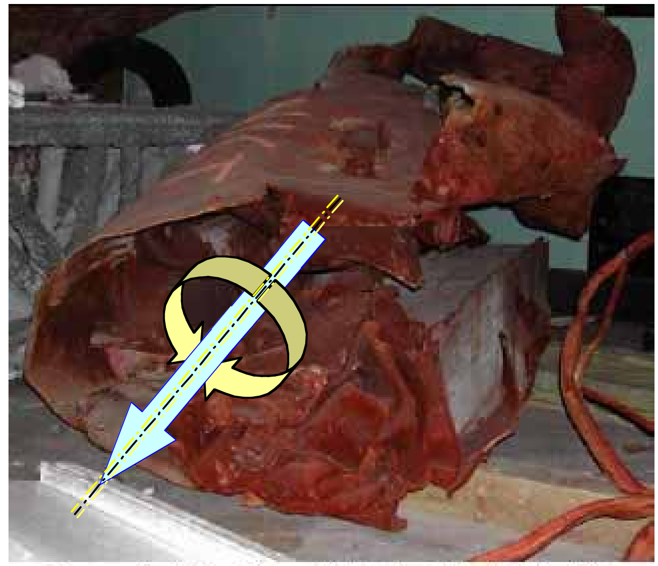


Figure F-A-2b: Piece K-1 (also labeled K-13(.

Figure 42. "Pepperoni roll" WTC beams.
NISTNCSTAR1-3C Appxs.pdf, Attachment A, **WJE** No. 2003.0323.0, Page A-497, NISTNCSTAR 1-3C Appxs.pdf, File page (211 of 258), http://wtc.nist.gov/WTCfinal1-3.zip

Figure F-A-2c: Collapsed part of Column 210.

Figure 43. WTC beams that look like poured **cake mix**.
Source: NISTNCSTAR1-3C Appxs.pdf, Attachment A, **WJE** No. 2003.0323.0, Page A-497, NISTNCSTAR 1-3C Appxs.pdf, File page (211 of 258), http://wtc.nist.gov/WTCfinal1-3.zip

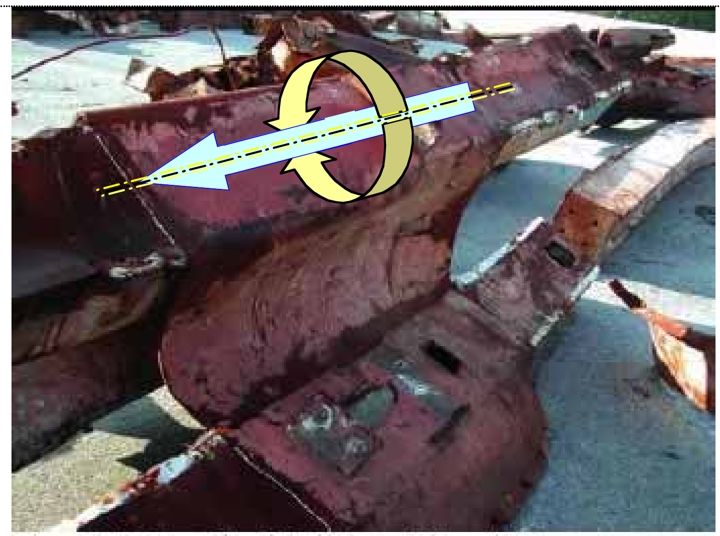


Figure F-B-9c: Identified Zones Z1 and Z0.

Figure 44. Straight WTC outer columns with spandrel belts wilted over them like **tissue paper**.
Source: NISTNCSTAR1-3C Appxs.pdf, Attachment A, **WJE** No. 2003.0323.0, Page B-520, NISTNCSTAR 1-3C Appxs.pdf, File page, (234 of 258), http://wtc.nist.gov/WTCfinal1-3.zip

Figure 45. The spandrel belt looks like a wet tissue was draped across the beams and spraypainted bright red. Rigid once again.

Source: Attachment A, **WJE** No. 2003.0323.0, Page B-520, NISTNCSTAR 1-3C Appxs.pdf, File page, (234 of 258), http://wtc.nist.gov/WTCfinal1-3.zip

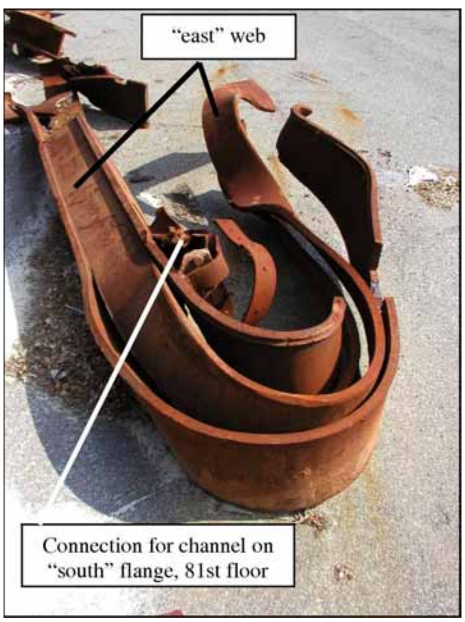


Figure 46. "Jellification"of WTC core columns.

Source: Page 203, NISTNCSTAR 1-3C chaps.pdf, File page, (253 of 336), http://wtc.nist.gov/WTCfinal1-3.zip
(9/05): NISTNCSTAR1-3C-chaps P253_c.jpg

Figure 47. Another example of jellification: spandrel belts appear to have had the mechanical properties of wet tissue paper before resolidifying.

Source: S14-C1B (WTC2,Col.219, Fl92) Seat Detail: 2110**,** Appendix B, NISTNCSTAR 1-3C Appxs.pdf, File page (128 of 258), http://wtc.nist.gov/WTCfinal1-3.zip
(9/05): S14-CIM (WTC2) Col.219.jpg

Figure 48. These outer columns are not buckled from an axial load, but the spandrel belts are folded about a vertical axis. There is essentially no applied mechanical load that would cause this.
(?/?)

Figure 49. WTC beams**.** These beams did not buckle. The beam on the left is straight with portions missing. Images show deterioration due to erosion/corrosion mechanism.
Source: Page 262, NISTNCSTAR 1-3C chaps.pdf, File page, (312 of 336), http://wtc.nist.gov/WTCfinal1-3.zip *(9/05)*: 312a.jpg

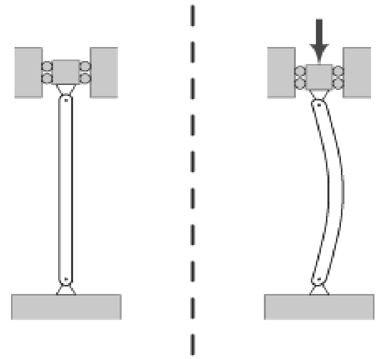


Figure 50. Buckling behavior. Buckling doesn't leave beams straight with missing material, like that shown in Figures **48** and **49**.

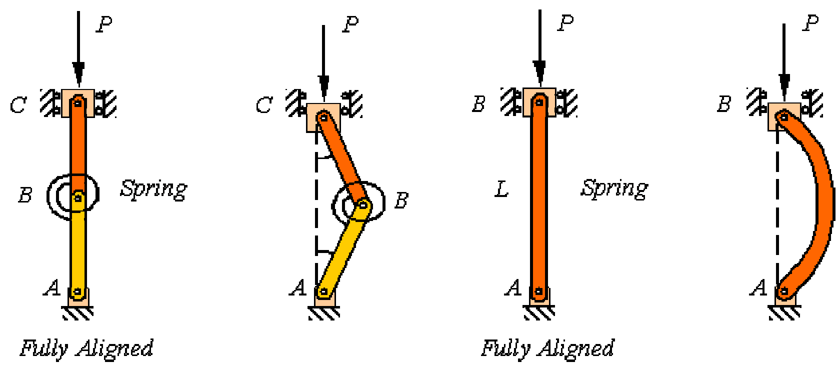


Figure 51. Kneeling and buckling.

$$F_{cr} = \frac{EI\pi^2}{L^2}$$

Critical load formula

5. If the WTC "collapsed" from overload, columns would exhibit buckling failure. However, there is a lack of buckled columns in the "rubble pile." For that matter, there is also a lack of a significant rubble pile.

No matter what hypothetical fire event is posited, the following cannot explain the "rolled-up carpets."

6. A gravity collapse with or without heat won't cause this type of failure.

- **Bombs won't cause this type of failure.**
- **A nuclear explosive won't cause this type of failure.**
- **Cutting torches won't cause this type of failure.**
- **Thermite can't cause this type of failure.**

Figure 52. Large pieces of steel recovered from the World Trade Center site sit in Hangar 17 at Kennedy International Airport. (Photo by Lane Johnson)

Figure 53. These columns don't look like 500,000 tons of building landed on them.

Figure 54. These WTC beams (wheatchex) stabbed into the street without buckling.
http://www.sharpprintinginc.com/911_math/mech_room_perimeter.jpg

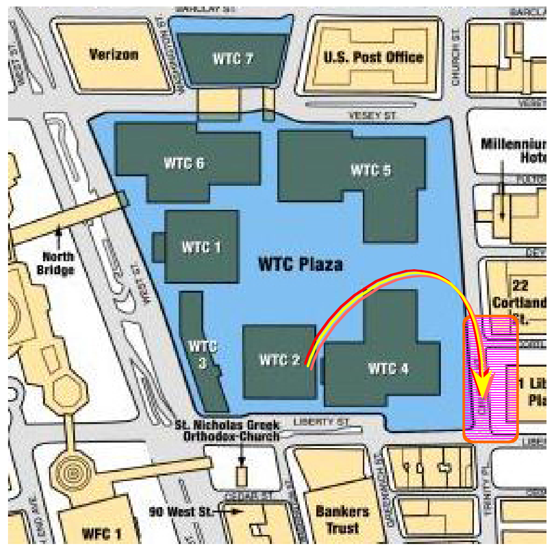


Figure 55. Those wheatchex flew a long way, approximately 500 feet.
http://www.sharpprintinginc.com/911_math/wtc_map.jpg

Figure 56. Anomalous bending of a massive core column with smooth bend.

Figure 57. This set of columns doesn't look crushed by 500,000 tons of building.

Figure 58. A bike rack removed from the World Trade Center site is kept with other artifacts in Hangar 17 at Kennedy International Airport. (Photo by Lane Johnson). Curled core column is seen in the background.

Figure 59. Large pieces of steel called tridents recovered from the World Trade Center site, and once a structural part of the ground level exterior arches of the twin towers, are preserved in Hangar 17 of Kennedy International Airport. There are about 1,350 pieces of steel, many weighing over 30 tons. (Photo by Lane Johnson)

[Image: Human hair shriveled by cig. Lighter]

Figure 60. Heat change the molecular structure of human hair. The non-uniform change causes curling.

[Image: Plastic shriveled by chemical]

Figure 61. Chemicals can also alter molecular structures. Plastic attacked by *whatever*.

7. Changing the molecular structure in one area of a material can produce anomalous bending.

Figure 62. Solid molybdenum, Hutchison-Effect beam, now in the possession of Col. John Alexander.
(Solid circular bar, 2.5-inch or 3-inch diameter)

Figure 63. Solid copper bar bent from the Hutchison Effect.
(Solid circular bar, 2.5-inch or 3-inch diameter)

Figure 64. I-beams deformed in the wrong direction. This deformation is inconsistent with overload.
Source: NIST http://wtc.nist.gov/media/gallery.htm

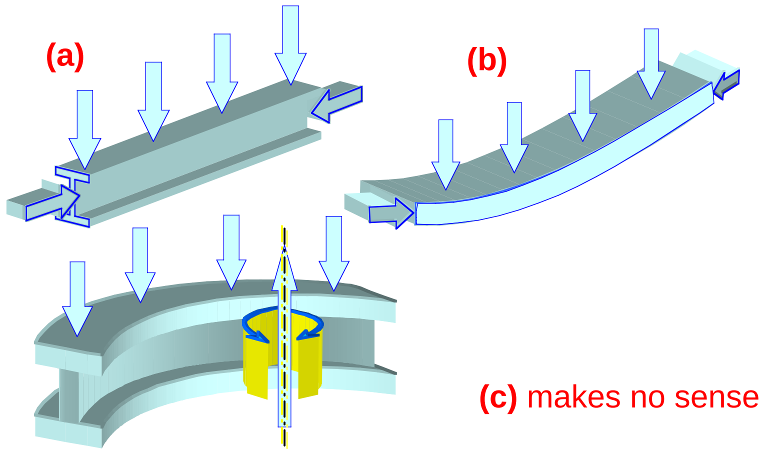


Figure 65. (a) loading of I-beam, (b) expected deformation from this loading, (c) **actual deformation** seen in beams found at GZ, as seen in Figure 64. The vertical loading should not cause the I-beams to bend around a vertical axis.

Figure 66. WTC core column curled, not buckled. A gravity-driven "collapse" would not do this. The beam above has smooth curves, without kinks.
(2002)

Figure 67. Buckled beams, characteristic of a gravity-driven collapse, were virtually non-existent at the WTC site. This bend is greater than 180°.
(2002)

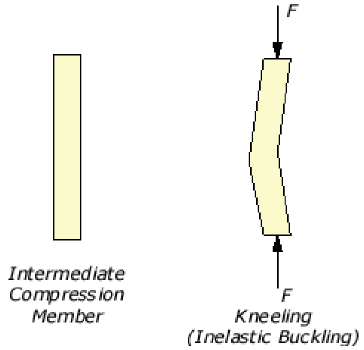


Figure 68. Overloading a structural column to the point of failure produces buckling, easily identified by kinks in the beam.

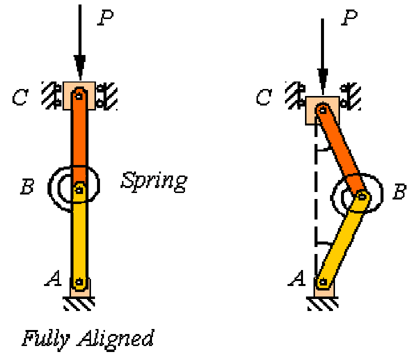


Figure 69. Buckling occurs near the midpoint of an unsupported length in a zone where the material is weakest. If buckling initiates at a point, it cannot deform a straight beam into a smooth arc of greater than a 180° bend.

This is what a gravity-driven collapse looks like.

Figure 70. The can kinks. The kinks are sharp.

Figure 71. The result.

This is what a directed-energy effect looks like.

Figure 72. Redbull can before. *(6/06)*

Figure 73. Red Bull can after being "DEWed." *(6/06)*